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ABSTRACT

Project TEACH completed the first year of a three-year program serving 190 newly arrived limited English proficient (LEP) students from the Caribbean, Central America and Cambodia. Virtually all students belonged to low-income families and many had received little formal education in their native countries. The primary goal was to facilitate students' linguistic and cultural adjustment to U.S. society through counseling and English as a second language (ESL) instruction, while providing computer literacy and business training. A long-term goal is to use computers to assist instruction in all content areas. Two bilingual counselors and a bilingual family assistant helped students with academic, career-oriented, and personal problems. Staff development was accomplished through outside courses, in-service workshops and presentations and involvement in developing computer assisted curricula. Parent involvement was effected via night classes in ESL and high school equivalency preparation, parent-teacher conferences, Parent Advisory Council meetings and project-sponsored theatre trips. Student data indicate that: (1) students met English language development objectives; (2) Spanish-speaking students met native language development objectives; (3) students surpassed mathematics and computing objectives both semesters; (4) students met attendance objectives; and (5) mainstreaming objectives in the business/computer program were met. A summary of the report is included. (MCK)

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THEODORE ROOSEVELT HIGH SCHOOL

PROJECT TEACH

1984-1985

OEA Evaluation Report

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O.E.A. Evaluation Section Report

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Grant Number: GOO-842-5058

THEODORE ROOSEVELT HIGH SCHOOL

PROJECT TEACH

1984-1985

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Project Director: Carmen Miranda

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A SUMMARY OF THE REPORT

Project TEACH (Technological Enrichment and Achievement for Cambodians and Hispanics) completed the first year of a three-year program in June 1985. One of four bilingual projects administered within Theodore Roosevelt's department of foreign languages and bilingual education, the project's major goal was to facilitate students' linguistic and cultural adjustment to U.S. society while preparing them to enter the job market armed with computer and business training. The project served 190 newly-arrived limited English proficient (LEP) students from the Caribbean, Central America, and Cambodia. Virtually all belonged to low-income families, and many had received only a sporadic formal education in their native countries.

In addition to English as a second language (E.S.L.), Spanish (for Hispanic students), and content-area instruction, the program offered specialized courses in career orientation, computer literacy, and business skills. A long-term goal of the program is to use computers to assist in instruction in all content areas, thus providing students with self-paced, individualized preparation in their subject areas as well as experience with computer technology. Unfortunately, due to lack of a Khmer-speaking teacher, this goal is being realized more for the Hispanic students than for the Cambodians, who are being taught exclusively in English with some translation by Cambodian paraprofessionals.

Title VII funding for program staff (director, resource teacher, secretary, two paraprofessionals, and family assistant) supplemented extensive tax-levy and Chapter I sources. Given the whole-hearted support of the school principal, the project will be institutionalized once Title VII funds expire. This administrative support is further bolstered by the support and unity of the teaching staff and the students.

Supportive services proved to be one of the greatest strengths of the program. Two extremely dedicated bilingual counselors and a bilingual family assistant helped students with academic, career-oriented, and personal problems. The entire staff worked diligently to assist students in adjusting to the often confusing demands of their new life in this country.

Staff development was accomplished through outside courses, in-service workshops and presentations, and involvement (particularly the E.S.L. and computer resource teachers) in developing computer-assisted curricula.

Parent involvement was effected via night classes in E.S.L. and in high school equivalency preparation, parent-

teacher conferences, Parent Advisory Council meetings, and project-sponsored theater trips.

Program objectives were assessed in English language development (Criterion Referenced English Syntax Test); mastery of their native language (Interamerican Series, La Prueba de Lectura); career, computer, and business math courses (teacher-made tests); and attendance (school and program records). Because of the lack of a Khmer-speaking teacher, it was not possible to assess Cambodian students' native language development.

Quantitative analysis of student achievement data indicates that:

-- Students mastered an average of 2.1 CREST objectives per month in the fall and 1.7 objectives per month in the spring, thus meeting the program objective.

-- Spanish-speaking students made statistically significant gains on the Prueba de Lectura, thus meeting the program objective.

-- The 70 percent passing criterion in mathematics and keyboarding/computer courses was surpassed both semesters. The passing rate for keyboarding/computer courses was 94.4 percent in the fall and 93.1 percent in the spring. In mathematics the overall passing rate was 82.4 percent.

-- Approximately 25 percent of the program students were mainstreamed in the business/computer program, thus meeting the stated objective.

-- The attendance rate for program students was significantly higher ($p<.01$) than the schoolwide attendance rate. The program objective was met.

Improvement is recommended in the following areas:

-- Locating a Khmer-speaking teacher;

-- Adjusting the administrative structure so that the bilingual projects can be directly supervised by an assistant principal for bilingual education;

-- Integrating computer work into content areas and involving more fully the general staff in computer-assisted curriculum development;

-- Increasing the number of guidance counselors to ease the extremely heavy case loads;

-- Improving parent involvement by using students to bring in parents for night classes and by convening the Advisory Council more often; and

-- Obtaining more office space for project personnel to increase efficiency and effectiveness.

ACKNOWLEDGEMENTS

The production of this report, as of all O.E.A. Bilingual Education Evaluation Unit reports, is the result of a cooperative effort of regular staff and consultants. In addition to those whose names appear on the cover, Margaret Scorza has reviewed and corrected reports, coordinated the editing and production process, and contributed to the quality of the work in innumerable ways. She has been assisted by Eulalia Cabrera, who interpreted findings, integrated material into reports, and wrote report summaries. Patricia Fitzpatrick has spent many hours creating, correcting, and maintaining data files. Finally, Joseph Rivera has worked intensively to produce, correct, duplicate, and disseminate reports. Without their able and faithful participation, the unit could not have handled such a large volume of work and still produced quality evaluation reports.

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PROJECT TEACH
AT THEODORE ROOSEVELT HIGH SCHOOL

Location:	500 East Fordham Road Bronx, New York 10458
Year of Operation:	1984-1985, First year of Title VII funding
Languages of Instruction:	English, Spanish, and Khmer
Number of Participants:	190
Principal:	Caesar Previdi
Project Director:	Carmen Miranda

I. INTRODUCTION

Since 1975, Theodore Roosevelt High School has offered bilingual education to students of limited English proficiency (LEP). For the most part, the different programs have focused upon Hispanics who constitute at present approximately 58 percent of the student population. However, in recent years, services have been provided for the rapidly increasing group of Cambodians who represent about four percent of the student body.

Project TEACH (Technological Enrichment and Achievement for Cambodians and Hispanics) is a new bilingual program which has targeted 120 Hispanic and 70 Cambodian students (mainly new arrivals) to receive computer and business training within a bilingual framework. The major goal of the project is to facilitate the students' linguistic and cultural adjustment to

U.S. society while preparing them to enter the job market.

The project functions within the department of foreign languages and bilingual education, which also administers three other programs: a bilingual program for Hispanic students, a bilingual program for Vietnamese students, and a bilingual General Equivalency Diploma (G.E.D.) program. The project is under the supervision of the department's assistant principal (A.P.). Project TEACH staff includes a director, a resource teacher, a family assistant, a secretary, eight paraprofessionals, two bilingual guidance counselors, and 30 teachers. Title VII funds the first four positions plus those of two of the paraprofessionals.

Project TEACH provides instruction in language development and specific content-areas. Hispanic students are taught content material (including computer literacy) bilingually. Cambodian students are taught in English, with the assistance of Khmer-speaking paraprofessionals. All program students receive instruction in music, art, gym, and some business courses in mainstream classes. Six courses of English as a second language (E.S.L.) and of E.S.L. reading are offered which cover beginning through advanced levels of proficiency and also prepare for transition to mainstream English courses. Seven native language arts courses are offered to the Hispanic students, which range from classes for illiterates to advanced college-level classes. Both E.S.L. and Spanish placement are based on student language proficiency. There is no Khmer

language instruction at this time, due to the lack of a certified teacher.

Percentages of English and native language use in content-area classes vary according to student proficiency, teacher preparation, course level, and availability of materials. The goal, nevertheless, is to achieve an increase in English usage as the academic year advances in order to implement the objective of mainstreaming by the twelfth grade.

II. STUDENT CHARACTERISTICS

While the overall student population of Theodore Roosevelt High School has been declining due to the deterioration of the surrounding area (South Bronx), there has been an increase in the number of Hispanic (particularly Central American) and Cambodian LEP admissions in all grades. Many are recent arrivals and have never been served in Title VII programs.

The criteria for entry into Project TEACH include: limited English proficiency as indicated by scores on the Language Assessment Battery (LAB) and the Criterion Referenced English Syntax Test (CREST), as well as informal interviews and teacher-made assessments. Other considerations are teacher recommendations and past achievement and attendance levels. Students admitted tend to be those who have demonstrated commitment and diligence in the past and who express a strong interest in the program.

The 190 LEP students served by the project come from a variety of Caribbean and Central American countries or from Cambodia (see Table 1). They all belong to low-income families as evidenced by their eligibility for the free lunch program. Many have had a spotty formal education due to social and political upheaval in their native countries, and, as a result, are overage for their grade level (see Table 2). Their native language skills have not been fully developed; there is nevertheless a wide literacy range, from almost non-functional to college level.

Project TEACH admits students in grades nine to eleven. In 1984-85, students were equally distributed in these three grades. Females outnumbered males in grades ten and eleven. The project goal is to mainstream participants before they enter grade twelve. (The extent of mainstreaming cannot be assessed as yet, since this is the first year of the project.) An attempt has been made to have equal numbers of males and females, but the project director explained that this was difficult among the Cambodians, given that more male children were sent to the United States.

The students are described by staff personnel and school administrators as exceptionally cooperative, respectful, and hard-working. This exemplary behavior is attributed to the tradition of education sustained in the students' native countries, as well as to the students' strong motivation to advance themselves in their new environment.

TABLE 1

Number and Percent of Program Students by

Language and Country of Birth

Language	Country of Birth	Number	Percent
Spanish	Puerto Rico	50	27
	Dominican Republic	45	24
	(country unspecified)	22	12
	United States	1	less than 1
Khmer	Cambodia	70	37
TOTAL*		188	100

*Country of birth data were missing for two Spanish-speaking students.

- The majority (63 percent) of program students are reported to be native speakers of Spanish. The highest number in this group was born in Puerto Rico and the second highest number was from the Dominican Republic.

- Thirty-seven percent of the program students were born in Cambodia. They are native Khmer speakers.

TABLE 2

Number of Program Students by Age and Grade

Age	Grade 9	Grade 10	Grade 11	Total
13	2	0	0	2
14	6*	1	0	7
15	18*	9*	0	27
16	15	14*	8*	37
17	9	17	15*	41
18	12	13	10	35
19	3	2	12	17
20	2	3	5	10
21	0	4	3	7
22	0	0	3	3
23	0	0	2	2
25	0	0	1	1
TOTAL	67	63	59	189
Overage Students				
Number	41	39	36	116
Percent	61	62	61	61

*Indicates expected age range for grade.

- Sixty-one percent of the program students are overage for their grade placement.
- Percentages of overage students are fairly equal in all grades.

III. FINDINGS

The evaluation findings for the 1984-85 academic year include both objectives measurable by standardized test results and those assessed through examination of program material and records, site visits, and interviews with school personnel. Following are the findings related to objectives for the present year as proposed to and accepted by the Office of Bilingual Education and Minority Languages Affairs, U.S. Department of Education.

ENGLISH AS A SECOND LANGUAGE

-- As a result of participating in the program, students will master an average of one English syntax objective per 20 days of instruction.

All program students are required to take E.S.L. and E.S.L. reading each day. Students are placed in elementary, intermediate, advanced, or transitional groups according to their linguistic levels as determined by the LAB and CREST, teacher-made exams, teacher evaluations, guidance referrals, and interviews. Elementary and intermediate E.S.L. students receive two periods of instruction daily, while advanced and transitional students attend one E.S.L. class and one period of mainstream English.

E.S.L. instruction is monitored by the Chapter I office, and Chapter I funds cover the teacher positions, paraprofessionals textbooks, materials, and teacher training. A member of the evaluation team observed a beginning E.S.L. class

composed of Hispanic and Cambodian students. The class was working on a reading from the Lado series, concerning the discovery of penicillin. The teacher (whose accent suggested a non-native speaker) directed questions to the students who volunteered answers. All teacher-student exchanges were in English. The class, guided by the teacher, discussed the responses.

The teacher used moldy bread and fruit to demonstrate graphically the material in the reading. She also drew pictures on the board and wrote down important terms for the students to copy. The pace was quick and lively, and student involvement was high.

After the reading was fully covered, the teacher assigned questions in the text and announced a test for the following day. She and a Hispanic paraprofessional then circulated through the class and checked student work, clarifying any obscurities in the assignment.

The classroom was pleasant and airy with ample seating. There were a few students sharing books.

Student Achievement in E.S.L.

The assessment instrument used to evaluate the objective in this area was the Criterion Referenced English Syntax Test* (CREST). The CREST was developed by the New York City Public

*Extensive information on CREST syntax skills and psychometric properties are in the Technical Manual, New York City English as a Second Language Criterion Referenced English Syntax Test, Board of Education of the City of New York, Division of High Schools, 110 Livingston St., Brooklyn, N.Y. 11201.

Schools to measure mastery of the syntax skills presented in the E.S.L. curriculum. The CREST uses four items to measure each skill, and mastery is achieved when three of the four items are answered correctly. The test has three levels: beginning (1), intermediate (2), and advanced (3). Levels 1 and 2 each measure mastery of 25 skills, while Level 3 measures mastery of 15 skills.

The CREST was administered at the beginning and end of each semester. A mastery score to indicate gains was computed for each student by calculating the difference between pretest and posttest. The number of months of instruction between testings was computed for each student by multiplying the number of months between testings by the student's attendance rate. The number of skills mastered per month was calculated by dividing the mean mastery by the mean number of months of instruction between testings.

Table 3 presents the test results for students who were pretested and posttested with the same level. Of the students who were reported to be taking E.S.L. classes (levels 1, 2, and 3), complete data were available for 100 percent (154 students) in the fall and 93.4 percent (142 students) in the spring.

Examination of Table 3 reveals that the program objective was achieved both semesters. In the fall, students mastered 2.1 CREST objectives per month of instruction. The mastery rate for the spring was 1.7 CREST objectives per month of instruction. There was a decrease in objectives mastered from Level I to Level 3.

Students tested at Level 3 had lower performance rates than those tested at lower levels, partly because fewer skills are tested at that level and partly because mastery of objectives takes longer at that level. The program objective appears to be based on the assumption that progress across levels is linear; the lower achievement at Level 3, which is found frequently in other bilingual high school programs, suggests that it is not.

TABLE 3

Results of the Criterion Referenced English Syntax Test

Test Level	Number of Students	PRETEST Mean	PRETEST S.D.	POSTTEST Mean	POSTTEST S.D.	MASTERY Mean	MASTERY S.D.	Mean Mastery Per Month
				FALL				
1	65	8.4	5.3	13.2	5.8	4.8	2.6	2.4
2	64	12.9	6.1	17.3	5.3	4.4	2.7	2.2
3	25	8.9	2.8	11.6	2.2	2.7	1.7	1.4
TOTAL	154	10.4	5.8	14.6	5.7	4.2	2.6	2.1
				SPRING				
1	34	9.4	6.1	14.7	6.8	5.3	2.5	1.8
2	73	12.0	6.7	17.3	11.8	5.3	10.0	1.9
3	35	8.6	2.9	11.1	2.7	2.5	1.6	1.0
TOTAL	142	10.5	6.0	15.2	9.5	4.7	7.4	1.7

- The program objective was met at all levels in both the fall and spring.

NATIVE LANGUAGE ARTS

-- As a result of participating in the program, Spanish-speaking students will show significant gains in the Prueba de Lectura.

Spanish

The Foreign Languages/Bilingual Education Department offers Spanish language courses to both native and non-native speakers. All Hispanic program students are enrolled in the native language sequence. Placement is based upon the Prueba de Lectura and teacher evaluations. Seven Spanish courses are offered which include: 1) classes for illiterate Hispanic students, 2) classes for slow learners, 3) four levels of regular Spanish instruction for Hispanics, and 4) an advanced placement class.

A member of the evaluation team observed a session of an advanced Spanish class. The classroom was sunny and comfortable. The fully bilingual teacher was guiding the class of 22 students through an analysis of an essay entitled "La Sonrisa" from the Tesoro Hispanic text. All discussion was in Spanish. The lesson centered on the vocabulary, style, and theme of the essay. Students freely volunteered answers and raised issues. They were very cooperative except when the teacher reminded them of homework due the next day, and then they responded with the usual protesting and rustling common to adolescent students.

Khmer

The project originally proposed having native language arts instruction in Khmer. Unfortunately, a suitable in-

structor has not been located, and classes could not be offered. Khmer is used by the two Cambodian paraprofessionals to assist students in otherwise English-taught courses.

Student Achievement in Spanish

The assessment instrument used to measure gains in reading and writing in Spanish was the Prueba de Lectura*, Level 3, Forms C and D. The Prueba de Lectura is part of the Inter-American Series of Tests published by the Guidance Testing Associates. The test items for the series are selected for cultural relevance to both Anglo-Saxon and Hispanic cultures in the Americas.

The Prueba de Lectura was administered in the fall and spring. Because the publishers recommend local norms and programs use off-level testing, analysis was based on raw score gains rather than on standard score gains. The results are presented in Table 4. Complete data on both tests were available for 115 of the Spanish-speaking program students (97 percent).

Statistical significance of the mean gain was determined through the correlated t-test model to demonstrate whether the mean gain is larger than would be expected by chance variation alone. Because statistical significance does not provide enough descriptive information, the table also includes the proportion of students making gains.

*Information on psychometric properties may be found in Guidance Testing Associates Examiner's Manual, Prueba de Lectura, St. Mary's University, One Camino Santa Maria, San Antonio, Texas 78284.

Examination of Table 4 reveals that overall, the program objective was met. Posttest scores were significantly higher ($p.<05$) than pretest scores. Eighty-six percent of the students were making gains of one or more points on the Prueba de Lectura.

TABLE 4

Results of the Prueba de Lectura, Level 3

Number of Students	PRETEST Mean	PRETEST S.D.	POSTTEST Mean	POSTTEST S.D.	GAIN Mean	GAIN S.D.	Proportion Making Gains
115	84.8	17.4	92.5	14.9	7.7*	9.8	86

*Statistically significant at the .05 level.

- Posttest scores were significantly ($p.<05$) higher than pretest scores.
- Eighty-six percent of the students made actual gains on the Prueba de Lectura.

CONTENT-AREA SUBJECTS

-- At least 70 percent of the students enrolled in keyboarding or computer courses will attain the criterion level set on teacher-made exams.

-- At least 70 percent of the students enrolled in mathematics courses will attain the criterion level set on teacher-made tests.

-- At least 25 percent of the participants in the bilingual career and business/computer program will be partially mainstreamed in the regular business/computer program at Theodore Roosevelt High School by the end of the first year.

Project TEACH offers bilingual content-area instruction in science, social studies, and mathematics. A member of the evaluation team observed an American studies class and a global history class (both for Hispanics and taught in Spanish) and found them to be well organized and parallel in content to the mainstream curricula. Both teachers were competent (though different in teaching style and in language proficiency), and student involvement was satisfactory overall, and superlative in the global history class.

The major thrust of the program, however, is toward computers, mathematics, and business skills. To assess the effectiveness of the program in these specialized areas, a member of the evaluation team visited classes in bilingual word processing for Hispanics, keyboarding for Cambodians, integrated math for Cambodians, integrated math for Hispanics, and a remedial math workshop for Cambodians.

The bilingual word processing class was engaged in composing a commercial business letter in Spanish, in preparation

for the Spanish Regents exam taken soon after. Use of the computers to assist learning in other areas is part of the approach of Project TEACH.

Twenty-two students were sitting in pairs around a dozen IBM personal computers in an air conditioned room. The teacher (who also teaches Spanish) wrote the lesson on a plastic marking board at the front of the room. The students followed through on the task more or less independently, with the teacher and a paraprofessional assigned to the computer room advising and checking progress. Once the task was completed, the students printed out their work, handed it in, and then occupied their free time with computer math games.

The teacher is very proficient in English and Spanish and stated that his policy is to use 75 percent Spanish and 25 percent English. Since virtually all of the software and the manuals for computers are in English, English is used to acquaint students with the computer terms they will encounter later on. During the visit, primarily Spanish was heard, with a few scattered comments in English.

The students were very involved in their work. They expressed genuine satisfaction with the course and the teacher. The room was quiet except for murmured consultations.

The teacher commented that the class was doing well, and examination of the letters produced by the students corroborated his statement. He expressed confidence in the program despite its recentness. The teacher was specially trained to

conduct the class, and he mentioned that other teachers were similarly preparing themselves to deal with the computers.

The class in keyboarding for Cambodians was very different. Twenty-four students were seated at electric typewriters practicing drills (Level 1) or writing business letters (Level 2). The monolingual English-speaking teacher wrote the assignments on the board in English (the language of instruction) and then circulated around the room checking work. A Cambodian paraprofessional translated and explained material to the students, most of whom were recent arrivals with very little knowledge of English. The teacher explained that the rationale behind having students learn to type in English before they could speak English was to familiarize them with the alphabet and letter combinations, and to give them a masterable manual skill that could bolster their self-confidence in an otherwise confusing setting. The teacher also stated that most students would receive an audit grade and would take the course again until their English proficiency could permit them to complete course requirements (many of which are language based) and advance to the next level. Students were all working busily, and the papaprofessional commented that they were very diligent and disciplined.

Two other classes that were observed were the math workshop and the integrated math for Cambodians. The math workshop is aimed at strengthening students' basic arithmetic skills and relating them to business needs. The lesson that was observed

appropriately covered the calculation of sales tax.

The class was large (36 students), mostly younger teens. The teacher used only English. She is assisted three days a week by a Cambodian paraprofessional who was not present during the visit. The teacher was very firm, and the students smiled a lot and worked very hard for her. She put problems on the board and had the students do them at their desks and at the board. She gave out materials she had prepared based on a sale circular from a local store. According to the project director, the teacher is very creative, and was responsible for generating much of the math and science curricular materials. For example, she rearranged the science course sequence for the Cambodians so that they would take the most mathematical and least language-dependent courses (physics, chemistry) first, and the most linguistically complex (biology) last.

The integrated math class for Cambodians was taught by an Italian teacher completely in English. A paraprofessional assists this class twice a week and was present during the observation. Most of the students in this class are sufficiently proficient in English to participate fully in classroom activities (although one young man answered a question by stating: "I don't know how to say it, but I know how I got the right answer."). In addition to the 20 Cambodians present that day, there were two or three Hispanic students who were there as a result of programming difficulties, something the director explained is occasionally unavoidable.

The teacher gave students problems related to isosceles triangles and then had volunteers present solutions at the board. He had a fast-paced style, but was very sensitive to the students' language needs and explained problems at different levels of linguistic complexity.

The students were all very eager and engrossed in their work. The director indicated that most were doing well and enjoyed their math class because it was an area in which they could excel regardless of language proficiency.

The positive impression made by the teacher was further substantiated when he was observed giving the same lesson in the integrated math class for Hispanics. This was the most completely bilingual session observed. The teacher (who is highly proficient in Spanish, albeit with an Italian accent) used Spanish and English in almost equal proportions, introducing material in Spanish and then reinforcing it in English. To prepare students to take the Regents exam in English, he wrote mathematical rules and the homework assignment on the board in English. Otherwise, the class procedure was very similar to that used with the Cambodians. The teacher was firm and clearly in charge, yet warm and considerate. The students were cooperative and involved.

Student Achievement in Mathematics and Keyboarding/Computer Courses

Table 5 presents the passing rates for program students in mathematics and keyboarding/computer courses each semester. A weighted average for the year was also computed.

Examination of Table 5 reveals that the 70 percent passing criterion was surpassed in both the fall and spring terms, thus meeting the program objective. Students enrolled in keyboarding/computer courses attained a passing rate of 94.4 percent in the fall, and 93.1 percent in the spring. In mathematics, the overall passing rate was 82.4.

Student Mainstreaming in the Business/Computer Program

According to the project director, 50 students (approximately 25 percent) were mainstreamed into the business/computer program in the current academic year, thus the program objective was met.

TABLE 5

Passing Rates in Keyboarding/Computer and Mathematics Courses

	FALL		SPRING		TOTAL
Course	Number of Students	Percent Passing	Number of Students	Percent Passing	Overall Passing Rate
Keyboarding/ Computer	110	94.5	101	93.1	92.0
Mathematics[a]	177	84.7	181	80.1	82.4

[a] Ranges from fundamental to business math.

- Students surpassed the proposed 70 percent passing rate both in the fall and spring semesters.

ATTENDANCE

-- As a result of participating in the program, students' attendance will be significantly higher than the attendance of mainstream students.

Everyone interviewed, from the principal, to the guidance counselors, to the family assistant cited better attendance as one of the positive features of the program. The general opinion was that the students attend school regularly since their linguistic needs are being met and every effort is being made to ease their adjustment to U.S. society. The individual attention and counseling provided by virtually every staff member appeared to the evaluation team to be the major factor in making the students want to attend every day. According to the project director only three students dropped out of the program during the year.

The school uses a taped phone message to make wake-up calls to chronically tardy students and to alert parents to any unexplained absences. The principal stated that this has proven very effective, although not often necessary with the bilingual program students. In the event of a recurring problem with a program student, the bilingual family assistant confers with both the student and the family to work out whatever problem was causing the truancy. The family assistant reported that program students are generally very responsible and that excessive absences are usually due to severe crises at home.

Attendance Outcomes

Statistical significance between program and school attendance was determined through the application of a z-test for the significance of a proportion.* This procedure tests whether the difference between one proportion (the program's attendance) is greater than what can be expected by chance variation.

The attendance rate for program students was 92 percent, 16 percentage points above the schoolwide attendance rate (76 percent). The z-test results (z=5.22) indicated that the difference in attendance rates is statistically significant (p:<01). The program objective was thus met.

*Bruning, J.L. and Kintz, B.L.; Computational Handbook of Statistics; Scott, Foresman and Company, 1968.

STAFF TRAINING

-- Fifty percent of the staff will be involved in other than in-service training including university courses, professional seminars, workshops, and conferences.

-- One hundred percent of the staff will be involved in in-service training such as the development of computer-assisted curriculum suitable for E.S.L., native language arts, and content areas.

According to the project director, virtually all of the personnel involved with the project were receiving outside training of some kind. A number of the teachers serving the program were developing their bilingual skills and/or seeking additional licenses or certifications. The two Title VII para-professionals were both enrolled in university courses to improve their English and obtain their teaching licenses. When they are graduated in approximately two years, they will then be available as teachers for the program. The computer resource teacher who also teaches Spanish, received the requisite training to enable him to teach the computer class and to provide in-service training for other teachers. The project director enhanced her capacity to run the project by attending numerous workshops and conferences. All staff members were involved in workshops in a Board of Education Staff Development Day.

In-service staff development included regular staff meetings and three workshops dealing with native language arts, computers, and mastery learning. Only a few staff members were directly involved in computer-assisted curriculum development, notably the E.S.L. and Spanish teachers.

PARENT PARTICIPATION

-- At least 60 percent of parents of student participants will visit the program once during the year to check on the progress of their children.

-- At least 80 parents will participate in the evening classes for high school equivalency preparation, E.S.L. instruction, and/or career/computer training.

Both the project director and family assistant confirmed that well over 60 percent of the students' parents had come to the school or had been contacted at home with regard to their children's progress. The guidance counselors indicated that they saw all of the parents who receive aid to dependent children (a large majority) in order to sign "Face-to-Face" letters to verify that the students attend the school.

Parents appeared at the school in order to participate in the following: four advisory council meetings leading to the approval of the project proposal, two parent-teacher conferences, two theater trips, and 120 hours of night classes.

According to the attendance sheets shown to a member of the evaluation team, approximately 55 parents participated in the evening classes offered by the program, somewhat less than the proposed objective. Two classes were offered from October 1984 through April 1985 -- one in E.S.L. and another in High School Equivalency. A proposed computer class was not given due to lack of interest and diversion of funds to areas more in demand. Given that the classes were over before site visits occurred, they could not be observed. Although parents could not be questioned directly, interviews with staff personnel and

conversations with students left an overall impression of parental satisfaction.

IV. CONCLUSIONS AND RECOMMENDATIONS

CONCLUSIONS

Project TEACH appears to be a successful program that is providing quality services to its students. Although it is only in its first year of operation, all indications are that it will continue to perform well in future years and meet its long-term objectives.

The project has met nearly all of its first-year objectives with the notable exception of bilingual instruction for Cambodian students. Despite extensive efforts to locate a suitable candidate, the program has not yet been successful and continues to rely on paraprofessionals to interpret for students in classes taught in English. The director is exceedingly unhappy with the situation, but sees some hope in the fact that at least two paraprofessionals will finish their college work within the next two years.

From formal and informal interviews with the project director, assistant principal of foreign languages, bilingual guidance counselors, and the principal, the evaluation team concluded that the project is being administered smoothly and is attaining the great majority of the instructional and resource development goals set out in its proposal. The project coordinates its offerings and services effectively with the rest of the school, and overall has developed productive relationships with mainstream staff. Teachers and paraprofessionals indicated considerable satisfaction with the progress of the

project and of the students in their classes. Students also expressed positive feelings about the program and the preparation they are receiving. While the evaluators were unable to speak directly with parents, attendance figures for parent education classes and parent-teacher conferences indicate extensive involvement on their part as well.

In addition, interviews with the family assistant and the bilingual guidance counselors, along with conversations with students, point to a major contribution of the project -- its function as a support mechanism for the students, many of whom are subject to great emotional upheavals due to displacement, separation from families, adverse economic circumstances, and other personal problems. This support role is made possible by the unflagging interest and availability of the Title VII and other staff for individual guidance and assistance in adjusting to a new language and way of life.

RECOMMENDATIONS

The following recommendations are aimed at improving the overall effectiveness of the program.

1. The most pressing need of the project is for a trained Khmer instructor and should be regarded as the major priority. Without such a teacher, the project cannot provide native language classes, do testing and follow-up, or make comparisons with other language groups in the school. It is imperative that the project redouble its efforts and call upon the Board of Education to give special attention to this need.

2. The school might consider the possibility of changing its administrative structure so that the bilingual programs would fall under the supervision of an A.P. for bilingual education. This would facilitate coordination of the various projects and allow direct supervision of the teachers by a person immediately involved in the day-to-day functioning of the different projects.

3. While the program has already made many gains with its computer literacy theme, it would be beneficial if there were more integration of the computer work into the content areas and more involvement of the general staff in developing the necessary curricula.

4. Given the heavy case loads of the two bilingual guidance counselors, it is recommended that the project petition the school for additional assistance in this area. This would enhance the supportive role of the project, which is perhaps its greatest strength.

5. The project might consider using the students to get their parents to attend the night classes. It would also be beneficial if the Parent Advisory Council convened more often and were involved more directly in the operation of the project.

6. Given the cramped quarters of the Title VII staff, it is recommended that the project solicit more office space from the school principal. At present, six staff members are squeezed into one small office where they also deal with students and parents and do placement testing. More space would increase the project's efficiency and effectiveness.